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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/814,903 | 03/30/2004 | Tetsuya Utsumi | 5000-5157 | 7614 |
| 27123 | 7590 | 04/25/2007 | EXAMINER | |
| MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101 | | | MONDT, JOHANNES P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3663 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 04/25/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | |
|------------------------------|-------------------|---------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/814,903 | UTSUMI ET AL. |
| | Examiner | Art Unit |
| | Johannes P. Mondt | 3663 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 February 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
 - 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11 and 15-16 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Amendment filed 2/9/2007 forms the basis for this office action. In said Amendment Applicant substantially amended claims 1-9 through substantial amendment of independent claim 1. Claims 1-11, 15 and 16 are elected and pending, claims 12-14 stand withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. ***Claims 1-4, 9, 10, 11, 15 and 16*** are rejected under 35 U.S.C. 102(b) as being anticipated by Yamagishi (WO 02/52338). For translation, reference is made to family member Yamagishi (US 2003/0107688 A1).

On claim 1: Yamagishi teaches (Figures 1 and 3; and [0016]-[0025] and [0029]-[0033]) an area light emitting device 202/203/204/205/2/11/3/10/50/51/1 with liquid crystal panel (10/3/11), hence clearly capable of being used with said liquid crystal panel, the area light emitting device comprising:

a transparent or translucent substrate 205/2 ([0019]-[0024]); and
an area light emitting element 202/203/204 ([0024]) arranged directly on and supported by the substrate (Figure 1A);
wherein:

the substrate includes a first surface facing the area light emitting element (i.e., the interface between 204/203 and 205: see Figure 1A) and a second surface facing away from said area light emitting element (i.e., interface between 2 and 11: see Figure 1A);

the area light emitting element is capable of emitting light that enters the first surface and exits from the second surface (see [0027]-[0033] and Figure 1A);

the second surface includes a recess (upper main surface of 2 has recess, see also recesses in 8 and to the left thereof in Figure 3) capable of accommodating (to make fit, to suit, to provide with something desired or needed; see Merriam-Webster's Collegiate Dictionary, 10th Edition, page 7) the liquid crystal panel, and the liquid crystal panel is capable of changing the characteristics of light emitted from the are light emitting element (such as the intensity of said light through tuning the voltage).

In reference to the claim language referring to "emits light....", line 8 of claim 1; "for accommodating...", line 10 of claim 1, and "changes the characteristics...", line 12 of claim 1, intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967); *In re Otto* , 136 USPQ 458, 459 (CCPA 1963).

On claim 2: the recess is positioned substantially at the center of the second surface (see Figures 1B and 3).

On claim 3: the recess is defined by a bottom surface (flat bottom portion of upper main surface of 2 in the recess: see e.g. Figure 1A) and side surfaces surrounding the

entire periphery of the bottom surface (i.e., curved side surfaces of said flat bottom portion).

On claim 4: the recess evidently is capable of completely accommodating (i.e., to make fit, to suit, to provide with something desired or needed; see Merriam-Webster's Collegiate Dictionary, 10th Edition, page 7) the entire liquid crystal panel because there are no teachings by Yamagishi of further needs in this regard.

On claim 9: the area light-emitting element is an organic electroluminescence element ([0007]).

On claim 10: Yamagishi teaches (Figures 1 and 3) an optical device (201/202/203/204/205/2/11/3/10/50/51/1) ([0016]-[0025]) comprising:
a liquid crystal panel (10/3/11) ([0019] and Figure 1A); and
a transparent or translucent substrate 205/2 ([0019]-[0024]); and
an area light emitting device 201/202/203/204/205/2 ([0024]) including a transparent or translucent substrate 205/2 ([0019]-[0024]) and an area light emitting element 202/203/204 ([0024] and Figure 1A) arranged directly on and supported by the substrate (Figure 1A);

wherein:

the substrate includes a first surface facing the area light emitting element (i.e., the interface between 204/203 and 205: see Figure 1A) and a second surface facing away from said area light emitting element (i.e., interface between 2 and 11: see Figure 1A);

the area light emitting element is capable of emitting light that enters the first surface and exits from the second surface (see [0027]-[0033] and Figure 1A);

the second surface includes a recess (upper main surface of 2 has recess) capable of accommodating (i.e., to make fit, to suit, to provide with something desired or needed; see Merriam-Webster's Collegiate Dictionary, 10th Edition, page 7) the liquid crystal panel, and the liquid crystal panel is capable of changing the characteristics of light emitted from the area light emitting element (such as the intensity of said light through tuning the voltage).

In reference to the claim language referring to "emits light....", line 8 of claim 1; "for accommodating...", line 10 of claim 1, and "changes the characteristics...", line 12 of claim 1, intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967); *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

On claim 11: the recess evidently is capable of completely accommodating (i.e., to make fit, to suit, to provide with something desired or needed; see Merriam-Webster's Collegiate Dictionary, 10th Edition, page 7) the entire liquid crystal panel because there are no teachings of further needs in this regard.

On claim 15: the area light emitting device is an electroluminescence device ([0024]) and, tautologically so, the liquid crystal panel is a liquid crystal panel.

On claim 16: the optical device is a liquid crystal device ([0019]), the liquid crystal panel is a liquid crystal panel (tautologically so), and the area light emitting device is an electroluminescence device ([0024]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. ***Claims 5-6*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi as applied to claim 1 and further in view of Oshitani et al (US 2002/0005824 A1) (see IDS filed 7/31/06).

As detailed above, claim 1 is anticipated by Yamagishi. Yamagishi does not necessarily teach the further limitation defined by claim 5 or claim 6. However, it would have been obvious to include the range limitation implied by claim 5 in view of Oshitani et al, who, in a patent of a liquid display device with electroluminescent element (title, abstract), hence analogous art, teach the liquid display panel 103 to have a thickness less than the depth of the recess in which said liquid crystal display panel is kept (Figure 12 and discussion). Furthermore, applicant neither defines the meets and bounds of the vague expression "substantially", which is at least extremely broad so as to encompass both the device by Yamagishi and the device by Oshitani et al, nor explains in the specification why the mutually compensating range limitations are critical to the invention.. Applicant is furthermore reminded that a *prima facie* case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art or when the ranges of a claimed composition do not overlap but are close

enough such that one skilled in the art would have expected them to have the same properties. *In re Peterson*, 65 USPQ2d 1379 (CA FC 2003).

2. **Claims 7-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi as applied above to claim 1, in view of Aoki et al (previously cited).

Although Yamagishi does not necessarily teach the further limitation defined by claims 7-8, it would also have been obvious to include said further limitation in view of *Aoki et al*, who, in a patent publication a liquid crystal display ([0001]) (hence analogous art) teach that sections can be made to reflect light less by positioning said sections in recesses of the transparent substrate wherein the bottom surface of the recess is a rough surface (see English abstract and Drawing 1). *Motivation* to include the teaching by Aoki et al derives from the resulting improvement by strongly reducing reflected light from the sections bottom sections, which are mainly responsible for transmitting light from the electroluminescence element, thus improving its functionality. The surface roughness as taught by Aoki et al is in the range of 0.03 – 2 μm . This range overlaps considerably with the range as claimed.

Applicant is reminded with regard to the ranges taught for surface roughness by Aoki et al that it has been held that a *prima facie* case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art or when the ranges of a claimed composition do not overlap but are close enough such that one skilled in the art would have expected them to have the same properties. (*In re Peterson*, 65 USPQ2d 1379 (CA FC 2003)).

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Applicant is advised that should claim 1 be found allowable, claim 10 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

4. Applicant is advised that should claim 4 be found allowable, claim 11 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

5. Applicant is advised that should claim 15 be found allowable, claim 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper

after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Response to Arguments

Applicant's arguments, see Remarks, filed 2/9/07, with respect to the rejection of claims 1-11, 15 and 16 over Shirasaki et al have been fully considered and are persuasive: liquid crystal panel shall henceforth be considered necessarily multilayered. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Yamagishi WO 02/52338).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johannes P. Mondt whose telephone number is 571-272-1919. The examiner can normally be reached on 8:00 - 18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JPM
April 20, 2007

Primary Patent Examiner:


Johannes Mondt (TC 3600, Art Unit: 3663)